WO 2005/067752 PCT/KR2004/001409

Claims

1. An inner shell for a safety helmet, which includes the inner shell and an outer shell, comprising:

a liner member opened at upper and lower parts thereof; and

5

10

an impact absorbing member surrounding a circumference of the liner member.

- 2. The inner shell as set forth in claim 1, wherein a plurality of first and second holes, through which bolts are to be passed, are formed through side, and front and rear walls of the liner member, and bushings are mounted in the second holes formed through the front and rear walls of the liner member.
- 3. The inner shell as set forth in claim 1, wherein the impact absorbing member is formed by foaming a resin material for foam use around the circumference of the liner member, the impact absorbing member being made of a foamed resin, including Styrofoam, a polyethylene foam, and a urethane foam.
- 4. The inner shell as set forth in claim 1, wherein the impact absorbing member is produced in a form of an attachment member and is attached to the circumference of the liner member.

WO 2005/067752 PCT/KR2004/001409

5. A method of producing an inner shell for a safety helmet, comprising:

a first forming step of injection-molding a molten plastic resin into a predetermined shape of liner member, the liner member being opened at upper and lower parts thereof;

5

10

15

a foaming preparation step of putting the liner member, molded through the first forming step, in a metal mold;

a second forming step of forming an impact absorbing member using a foamed resin, including Styrofoam, a polyethylene foam, and a urethane foam, in the metal mold after the metal mold is hermetically sealed; and

a post-processing step of separating the inner shell, formed through the second forming step, from the metal mold, and finishing the inner shell separated from the metal mold.